Case OR-6976

08/672128

PRODUCTION OF BRIDGED METALLOCENE COMPLEXES AND INTERMEDIATES THEREFOR

Abstract of the Disclosure

Bridged metallocene compounds are produced by a process of promising commercial utility for plant-sized operations. The overall process involves the direct conversion of benzoindanones to benzoindanols which, without isolation, are converted to benzoindenes. Thereupon the benzoindenes are bridged by deprotonating the benzoindenes with a strong base such as butyllithium and reacting the resultant deprotonated product with a suitable silicon-, germanium- or tin-containing bridging reactant such as dichlorodimethylsilane. The resultant bridged product is deprotonated with a strong base such as butyllithium and reacted with a suitable Group IV, V, or VI metal-containing reactant such as $ZrCl_4$ to provide a silicon-, germanium- or tin-bridged Group IV, V, or VI metal complex, such as a dihydrocarbylsilyl-bridged zirconocene complex. The initial benzoindenones used in such sequence can be formed readily and in high yield by reaction of a 2-haloacyl halide with naphthalenes unsubstituted in at least the 1- and 2-positions.